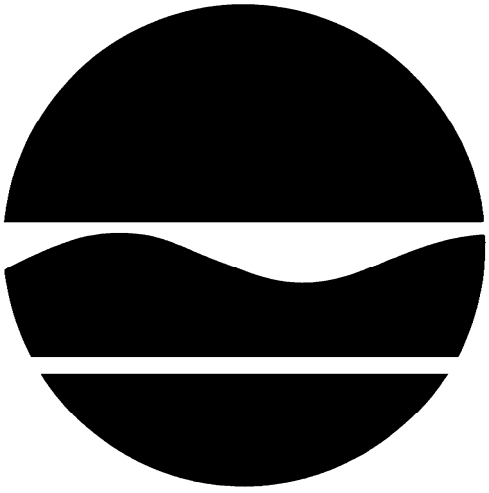
PROPOSED REMEDIAL ACTION PLAN
Villa Cleaners
Town of Babylon, Suffolk County, New York
Site No. 152188

February 2011



Prepared by:

Division of Environmental Remediation
New York State Department of Environmental Conservation

PROPOSED REMEDIAL ACTION PLAN

Villa Cleaners
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Site No. 152188
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SECTION 1: SUMMARY AND PURPOSE OF THE PROPOSED PLAN

The New York State Department of Environmental Conservation (Department), in consultation with the New York State Department of Health (NYSDOH), is proposing a remedy for the Villa Cleaners site. As more fully described in Sections 3 and 5 of this document, former disposal practices and releases to on-site sanitary leaching structures resulted in the disposal of hazardous wastes, including chlorinated volatile organic compounds. These wastes contaminated the subsurface soil and groundwater at the site.

Based on the findings of the investigation of this site, which indicate that the past disposal of hazardous waste at the site does not pose a significant threat to human health or the environment, No Action is proposed as the remedy for this site.

This Proposed Remedial Action Plan (PRAP) identifies the preferred remedy and discusses the reasons for this preference. The Department will select a final remedy for the site only after careful consideration of all comments received during the public comment period.

The Department has issued this PRAP as a component of the Citizen Participation Plan developed pursuant to the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375. This document is a summary of the information that can be found in greater detail in the April 2010 "Final Remedial Investigation Report". The public is encouraged to review the project documents, which are available at the following repositories:

Deer Park Public Library
Attn: Gail Pepa, Library Director
44 Lake Road
Deer Park, NY 11729-6047
Phone: (631) 586-3000
Library Hours: Monday to Thursday 9:00 am to 9:00 pm
Friday – 9:00 am to 6:00 pm
Saturday – 9:00 am to 5:00 pm
Sunday (September to May) – 12:00 pm to 4:00 pm
Check library for holiday hours.

Ms. Tara Diaz
Project Manager
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233-7015
(518) 402-9621

The Department seeks input from the community on all PRAPs. A public comment period has been set from March 1, 2011 to March 31, 2011, to provide an opportunity for public participation in the remedy selection process. A public meeting is scheduled for March 29, 2011, at the Deer Park Library beginning at 7pm.

At the meeting, the results of the remedial investigation (RI) will be presented along with a summary of the proposed remedy. After the presentation, a question-and-answer period will be held, during which verbal or written comments may be submitted on the PRAP. Written comments may also be sent to Ms. Diaz at the above address through March 31, 2011.

The Department may modify the proposed remedy or select another based on new information or public comments. Therefore, the public is encouraged to review and comment on all of the alternatives identified here.

Comments will be summarized and addressed in the responsiveness summary section of the Record of Decision (ROD). The ROD is the Department's final selection of the remedy for this site.

SECTION 2: SITE LOCATION AND DESCRIPTION

The Villa Cleaners site is located at 1899 Deer Park Avenue in a commercial area in the Hamlet of Deer Park, Town of Babylon, Suffolk County, New York. The site occupies one and one half acres on the east side of Deer Park Avenue, which runs approximately north-south in the vicinity of the site. The site is bordered to the north by the Long Island Railroad which is about 12 feet above the property. The properties to the south are occupied by a one-story commercial business. To the east, the property borders the front lawn of a public school administration building. The site location is shown on Figure 1 and a site plan is shown on Figure 2.

The site contains a single-story multi-tenant commercial building which was built in 1965. Villa Cleaners is located in the northern portion of the building and has been operating as a dry cleaner since the 1960s. An asphalt parking area is located in the western and southern portions of the site. The building uses on-site septic tanks and leaching pools for the disposal of sanitary wastes. There are five (5) sanitary leaching pool structures located in the western portion of the site, designated as RM-1 through RM-5 (Figure 2).

The site lies at approximately 75 feet above mean sea level. Topography slopes gently from the northeast to the southwest across the site. Underlying the site are the Pleistocene-aged glacial outwash deposits of the upper glacial aquifer. In the vicinity of the site, this aquifer is predominantly sand with some gravel and occasional lenses of finer materials (silt, clay, etc.). A layer of hard clay was identified at depths ranging from approximately 90 feet to 100 feet below ground surface (bgs). The actual thickness of the clay layer in the vicinity of the site is unknown.

The upper glacial aquifer is unconfined (i.e., not overlain by impermeable geologic materials), and water was encountered at approximately 12 feet to 14.8 feet bgs across the site. The aquifer's saturated thickness (i.e. top of water table to bottom of aquifer) ranges from approximately 76 feet to 86 feet across the site. A groundwater elevation contour map constructed from water levels, measured on December 4, 2008, shows that, in general, groundwater flows south-southwest across the site (Figure 3). Groundwater flows across the site at an approximate velocity of 2.4 feet per day. The overall horizontal gradient (i.e., the difference in water table elevation across the site) is 0.0022 foot per foot. The sands of the upper glacial aquifer are assumed to have a hydraulic conductivity (i.e., the aquifer's ability to

transmit water across the gradient) of 270 feet per day and an effective porosity (i.e., the open space between the grains of sand, etc. that the water can flow through) of 25 percent.

SECTION 3: SITE HISTORY

3.1: Operational/Disposal History

Contamination was reportedly the result of former disposal practices and releases to the five on-site sanitary leaching pools (RM-1 through RM-5). During a Suffolk County Department of Health Services (SCDH) inspection of the site in May 1997, soil was collected from the five sanitary leaching pools. The soil samples were found to contain tetrachloroethene (PCE), a commonly used dry cleaning compound.

In October 1997, a remedial action was conducted by Villa Cleaners consisting of the removal of liquid and soil from the on-site sanitary leaching pools and a storm drain towards the rear (east) of the site. Post-cleanout samples collected from the cleaned-out structures identified volatile organic compounds (VOCs) in the soils. PCE was detected at a concentration of 2 milligrams per kilogram (mg/kg) in the soil sample collected at RM-5. Groundwater screening sample results revealed concentrations of PCE, trichloroethene (TCE), *cis*-1,2-dichloroethene (*cis*-1,2-DCE), and vinyl chloride (VC) above applicable standards criteria and guidance (SCGs) in on-site groundwater and further indicated that the contaminated groundwater was migrating off-site. Additionally, the data identified the presence of PCE and its degradation products (i.e., TCE, *cis*-1,2-DCE) at and below the water table along the southern property boundary. The highest concentration of PCE (280 micrograms per liter [µg/L]) was identified at groundwater screening point GW-4 from 18 feet to 20 feet bgs. Historic investigation locations are shown in Figures 3 & 4.

In 1998, Villa Cleaners installed three shallow monitoring wells screened across the water table, and one cluster well screened at 20 feet to 22 feet, 40 feet to 42 feet, 60 feet to 62 feet, 80 feet to 82 feet, and 98 feet to 100 feet bgs. Subsequent rounds of groundwater sampling identified PCE at concentrations exceeding applicable SCGs at MW-2, MW-3, and at the 20-22 foot interval at the cluster well. TCE and *cis*-1,2-DCE were identified at concentrations exceeding applicable SCGs at MW-3 and were detected at the 40 feet to 42 feet and 60 feet to 62 feet bgs intervals at the cluster well.

In 1999, Villa Cleaners installed three additional groundwater screening and samples were collected at each point from 16 feet to 20 feet, 26 feet to 30 feet, 36 feet to 40 feet, 46 feet to 50 feet, 56 feet to 60 feet, and 66 feet to 70 feet bgs. Concentrations of PCE, TCE, *cis*-1,2-DCE, methylene chloride, and some VC exceeded applicable SCGs during this investigation. The highest levels of contaminants observed occurred at GP-3, which is north of MW-3. Concentrations were highest toward the shallower depth intervals, with a maximum PCE concentration of 1,720 µg/L at 16 feet to 20 feet bgs.

On May 12 and 13, 2004, the New York State Department of Health (NYSDOH) collected air samples to evaluate whether past disposal of waste materials at Villa Cleaners had impacted the indoor air quality at one attached and one detached on-site building located downgradient of the dry cleaners. Laboratory analysis detected PCE at a concentration of 6 $\mu g/m^3$ in all samples, however this is within range of background levels typically found in indoor environments not affected by a spill or other significant sources of contamination.

3.2: Remedial History

In 2004, the Department listed the site as a Class 2 site in the Registry of Inactive Hazardous Waste Disposal Sites in New York. A Class 2 site is a site where hazardous waste presents a significant threat to the public health or the environment and action is required.

SECTION 4: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers. The PRPs for the site, documented to date, include but are not limited to:

- Clout Associates is the current owner of the Site and owned the Site during the period of disposal
- Vionpa Dry Cleaners, Inc., d/b/a Villa Dry Cleaners ("Vionpa"), is the current operator of the dry cleaning establishment on the Site
- Jag-Mac, Inc., is a former operator of the Site
- Fanny Weinstein is a former owner of the Site

The Department and Vionpa executed a Voluntary Cleanup Agreement relative to the Site, Index No. D1-0001-04-01, dated May 10, 2002 (the "Agreement"). In January 2004, the Department elected to terminate the Agreement because of Vionpa's "failure to comply substantially with the VCA.

The Department and Vionpa executed an Order on Consent for the development and implementation of a remedial program for the Site, Index No. W1-0996-04-04, on June 16, 2004 (the "Order"). On July 23, 2007, the Department approved the Remedial Investigation ("RI") work plan for the Site. Vionpa failed to proceed with the required field work.

By letter dated December 20, 2007, the Department informed Vionpa that they were in non-compliance with the terms of the Order, and the Department would use the New York State hazardous waste remedial fund to implement the remaining remedial activities at the Site and would seek recovery from Vionpa for any expenses it incurred in conducting the work.

SECTION 5: SITE CONTAMINATION

A remedial investigation (RI) has been conducted to evaluate the alternatives for addressing the significant threats to human health and the environment.

5.1: Summary of the Remedial Investigation

The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The RI field work was conducted between October 2008 and December 2008. The field activities and findings of the investigation are described in the RI report.

A geophysical survey was conducted to determine the location of underground utilities in the investigation area and to locate the existing monitoring wells that had been covered or paved-over in recent years. Groundwater and lithologic screening was conducted along five transects within and

up/downgradient of the five sanitary leaching pools previously remediated under the direction of the SCDH. The list of analytes for this sampling event was established based on the results of previous sampling conducted by the SCDH and under the Voluntary Cleanup Program. These soil and groundwater samples, which were analyzed by an on-site mobile laboratory with standard confirmatory laboratory analysis, were also used to select additional sampling locations and to select the locations of five new monitoring wells. Five (5) new monitoring wells were installed (MW-4S through MW-8S), and groundwater samples were collected from the new wells. Lastly, a site topographic survey was conducted.

5.1.1: Standards, Criteria, and Guidance (SCGs)

To determine whether the soil and/or groundwater contain contamination at levels of concern, data from the investigation were compared to the following SCGs:

- Groundwater SCGs are based on the Department's "Ambient Water Quality Standards and Guidance Values"" and Part 5 of the New York State Sanitary Code.

- Soil SCGs are based on the "Unrestricted Use Soil Cleanup Objectives" as listed in the 6 NYCRR Part 375 (Environmental Remediation Programs) Subpart 375-6.

Based on the RI results, in comparison to the SCGs and potential public health and environmental exposure routes, no remediation is required. More complete information can be found in the RI report.

5.1.2: Nature and Extent of Contamination

This section describes the findings of the investigation for all environmental media that were investigated.

As described in the RI report, groundwater and soil samples were collected to characterize the nature and extent of contamination. As seen in Figures 5 through 9 and summarized in Table 1, the main categories of contaminants that exceed their SCGs are volatile organic compounds (VOCs). For comparison purposes, where applicable, SCGs are provided for each medium. Chemical concentrations are reported in ppb.

The following provides a list of the media that were investigated and a summary of the findings.

Soil

No soil contaminants above SCGs were identified during the RI. Therefore, no remedial alternatives need to be evaluated for soil.

Groundwater

Shallow groundwater shows only two chlorinated compounds exceeding groundwater standards, i.e., cis 1,2-DCE up 24 ppb compared to a standard of 5 ppb and VC up to 5.1 ppb compared to a standard of 2 ppb. Additionally, toluene was detected up to 840 ppb compared to a standard of 5 ppb. Intermediate depth groundwater had fewer compounds detected that exceeded standards with 1,4-Dichlorobenzene found once at 7 ppb compared to a standard of 3 ppb while no contaminants exceeding standards were detected in deep groundwater.

The distribution and concentration of historical contamination in the groundwater suggests that that contamination was discharged into the aquifer as a dissolved phase. The dissolved phase has migrated with the groundwater at the water table. Based on current groundwater concentrations and site-defined fate and transport variables, groundwater contamination has, or will over time be, dissolved and dispersed. Therefore, no remedial alternatives need to be evaluated for groundwater.

5.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the RI/FS.

There were no IRMs performed at this site during the RI.

5.3: Summary of Human Exposure Pathways

This section describes the types of human exposures that may present added health risks to persons at or around the site. A more detailed discussion of the human exposure pathways can be found in Section 5 of the RI report.

Drinking contaminated groundwater is not expected because on-site buildings and adjacent properties are serviced by a public water supply that obtains its water from a source not affected by this site.

Volatile organic compounds in the groundwater or soil may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Indoor air sampling was conducted to evaluate exposure to site-related contaminants and no further actions were deemed necessary.

The results of the RI indicate that there are no current or potential future human health exposure pathways that require remediation.

5.4: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site prior to the IRM. Environmental impacts include existing and potential future exposure pathways to fish and wildlife receptors, as well as damage to natural resources such as aquifers and wetlands.

Inspection and sampling conducted by the SCDH in 1997, confirmed the disposal of PCE in two on-site leaching pools. The primary contaminants of concern at the site included chlorinated solvents, such as tetrachloroethene (PCE) and its breakdown products, as well as a few other volatile organic compounds.

The results of the RI identified that there are no complete or potentially complete environmental exposure pathways or ecological risks, and as such, no current or potential future environmental exposure pathways require remediation.

SECTION 6: SUMMARY OF THE REMEDIATION GOALS AND PROPOSED REMEDY

Goals for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. At a minimum, the remedy selected must eliminate or mitigate all significant threats to public health and/or the environment presented by the hazardous waste disposed at the site through the proper application of scientific and engineering principles.

The main SCGs applicable to this project are as follows:

- ambient groundwater quality standards; and

- "Unrestricted Use Soil Cleanup Objectives" as listed in the 6 NYCRR Part 375 (Environmental Remediation Programs) Subpart 375-6.

The findings of the investigation, which was conducted in and around the former contaminated areas of concern, indicate that the site does not pose a significant threat to human health or the environment. Investigated contaminants were not identified in either soil or groundwater at levels exceeding the applicable SCGs that would pose an adverse impact, therefore, the Department is proposing No Action as the remedy for this site.

This remedy would be effective in protecting human health and the environment and complies with New York State standards, criteria, and guidelines.

TABLE 1
Nature and Extent of Contamination
October to December 2008

SOIL	Contaminants of Concern	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)[a]	Frequency of Exceeding SCG[b]
Volatile Organic Compounds (VOCs)	Tetrachloroethene	ND to 55	1,300	0 of 38
	Toluene	ND to 24	700	0 of 38

SHALLOW GROUNDWATER (approx 16 to 20 ft bgs)	Investigated Contaminants	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)[a]	Frequency of Exceeding SCG[b]
Volatile Organic Compounds (VOCs)	Cis-1,2-Dichloroethene	ND to 24	5	6 of 14
	1,2-Dichlorobenzene	ND to 0.56	3	0 of 14
	1,4-Dichlorobenzene	ND to 2.7	3	0 of 14
	Methylene Chloride	ND to 0.68	5	0 of 14
	Tetrachloroethene	ND to 3.4	5	0 of 14
	Toluene	ND to 840	5	3 of 14
	Trichloroethene	ND to 0.98	5	0 of 14
	Vinyl Chloride	ND to 5.1	2	4 of 14
INTERMEDIATE GROUNDWATER (approx 20 to 76 ft bgs)	**Investigated Contaminants**	**Concentration Range Detected (ppb)[a]**	**SCG[b] (ppb)[a]**	**Frequency of Exceeding SCG[b]**
Volatile Organic Compounds (VOCs)	Chlorobenzene	ND to 3.1	5	0 of 71
	Chloroform	ND to 6.2	7	0 of 71
	Cis-1,2-Dichloroethene	ND to 3.3	5	0 of 71
	1,4-Dichlorobenzene	ND to 7	3	1 of 71
	Methyl-t-butyl ether	ND to 8.6	10	0 of 71
	Methylene Chloride	ND to 0.99	5	0 of 71
	Tetrachloroethene	ND to 0.64	5	0 of 71
	1,2,4-Trichlorobenzene	ND to 1.2	5	0 of 71

TABLE 1
Nature and Extent of Contamination (Continued)

DEEP GROUNDWATER (approx 76 to 80 ft bgs)	Investigated Contaminants	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)[a]	Frequency of Exceeding SCG[b]
Volatile Organic Compounds (VOCs)	Chloroform	ND to 2.6	7	0 of 24
	1,1-Dichloroethane	ND to 3.3	5	0 of 24
	1,1-Dichloroethene	ND to 1.6	5	0 of 24
	Methyl-t-butyl ether	ND to 0.67	10	0 of 24
	Methylene Chloride	ND to 0.63	5	0 of 24
	Tetrachloroethene	ND to 0.85	5	0 of 24
	Toluene	ND to 2.8	5	0 of 24
	1,1,1-Trichloroethane	ND to 1.3	5	0 of 24
	1,1,2,2-Tetrachloroethane	ND to 0.96	5	0 of 24
	1,2,4-Trichlorobenzene	ND to 0.52	5	0 of 24
	Trichloroethene	ND to 3.1	5	0 of 24

[a] ppb = parts per billion, which is equivalent to micrograms per liter, ug/L, in water and ug/kg in soil;
[b] SCG = standards, criteria, and guidance values:

- Groundwater - NYSDEC's "Ambient Water Quality Standards and Guidance Values" and Part 5 of the New York State Sanitary Code
- Soil - "Unrestricted Use Soil Cleanup Objectives" as listed in the 6 NYCRR Part 375 (Environmental Remediation Programs) Subpart 375-6

N/A = no SCG available
ND = not detected at concentrations above method detection limit

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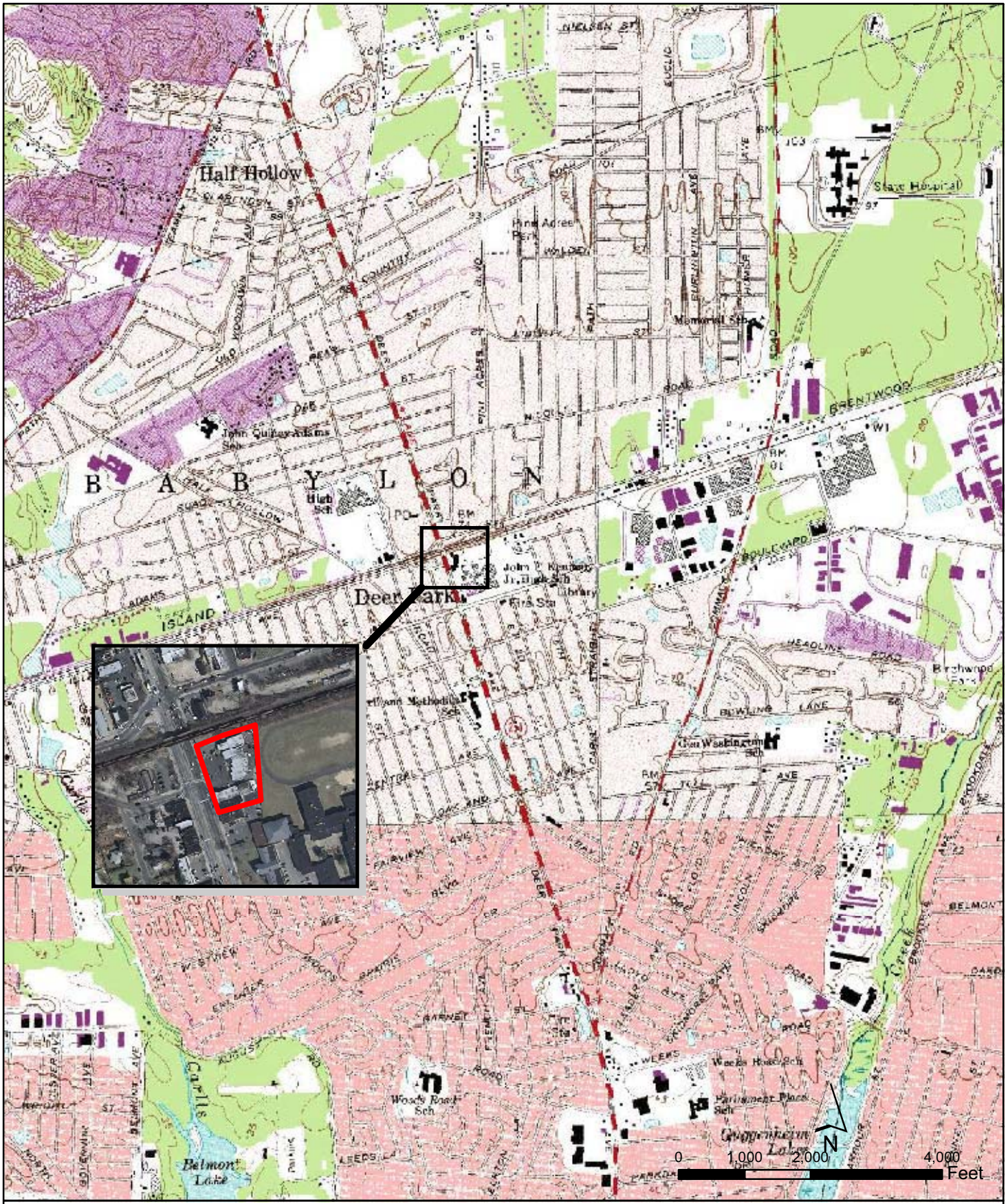

Legend

Site Boundary

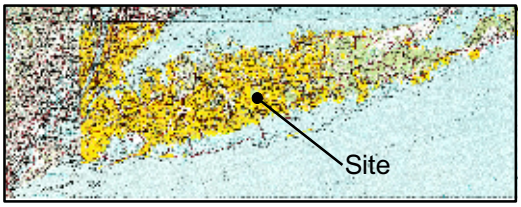

Figure 1
Site Location Map
Villa Dry Cleaners
Babylon, New York

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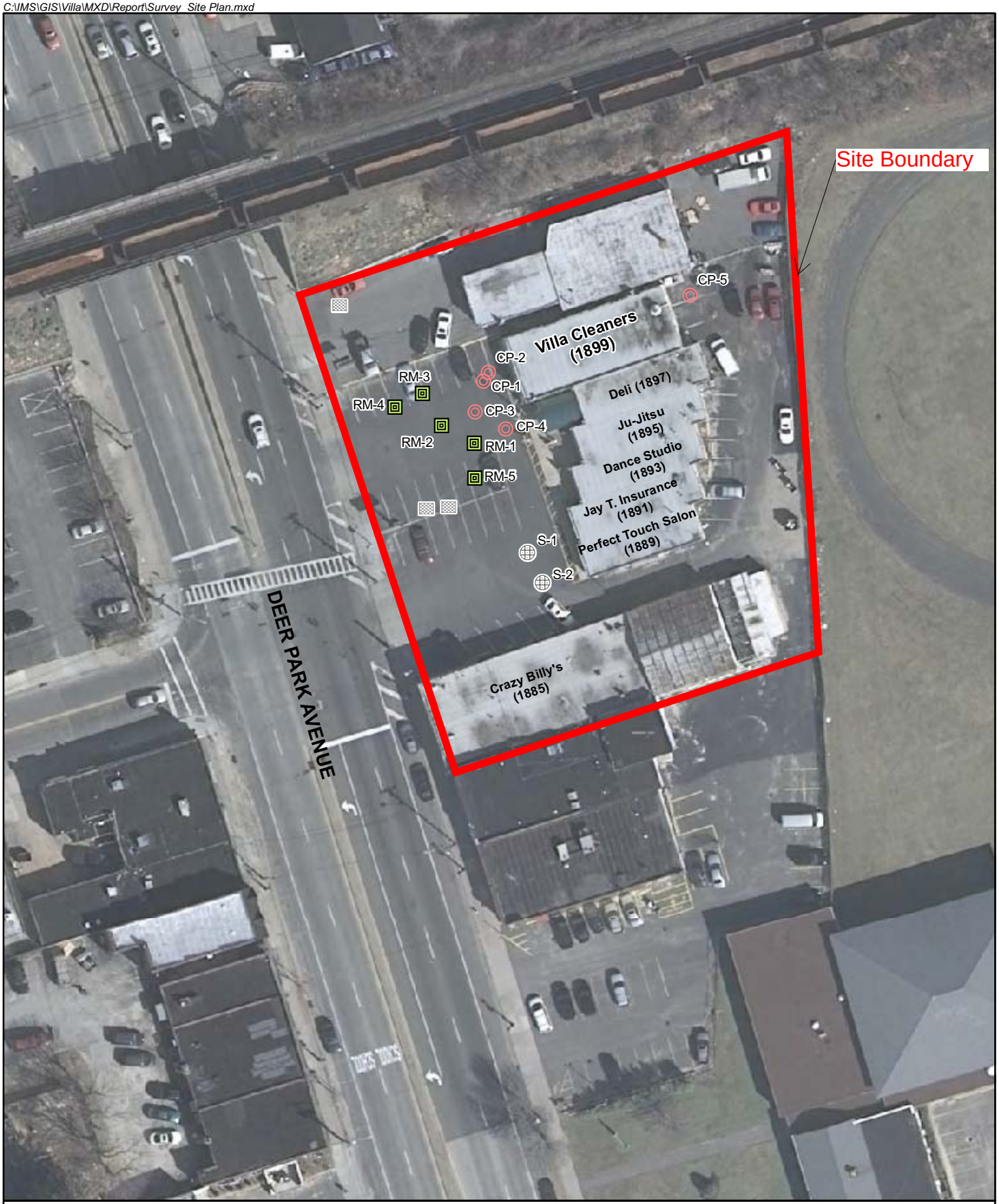

Site Features

- Cesspool
- Leaching Pool
- Sewer Access
- Catch Basin

N

0 30 60 120 Feet

Figure 2
Site Plan
Villa Dry Cleaners
Babylon, New York

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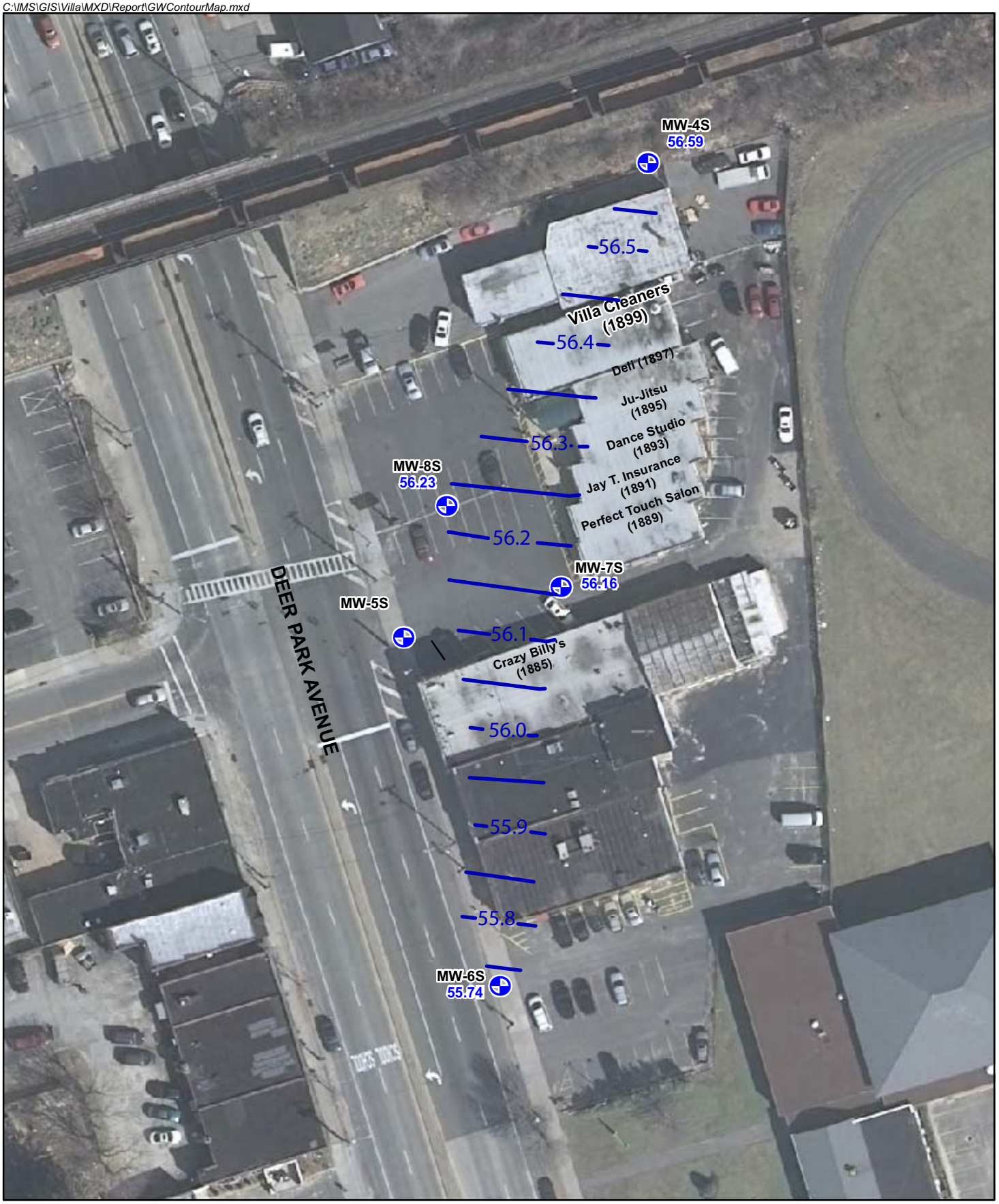

Monitoring Well

Groundwater Contours (December 4, 2008)

MW-7S - Well Name

57.74 - Groundwater Elevation (December 4, 2008)

Note: All elevations in ft above mean sea level.
MW-5S was inaccessible due to snow and ice therefore not measured.

N

0 30 60 120 Feet

Figure 3
Groundwater Elevation Contour Map
Villa Dry Cleaners
Babylon, New York

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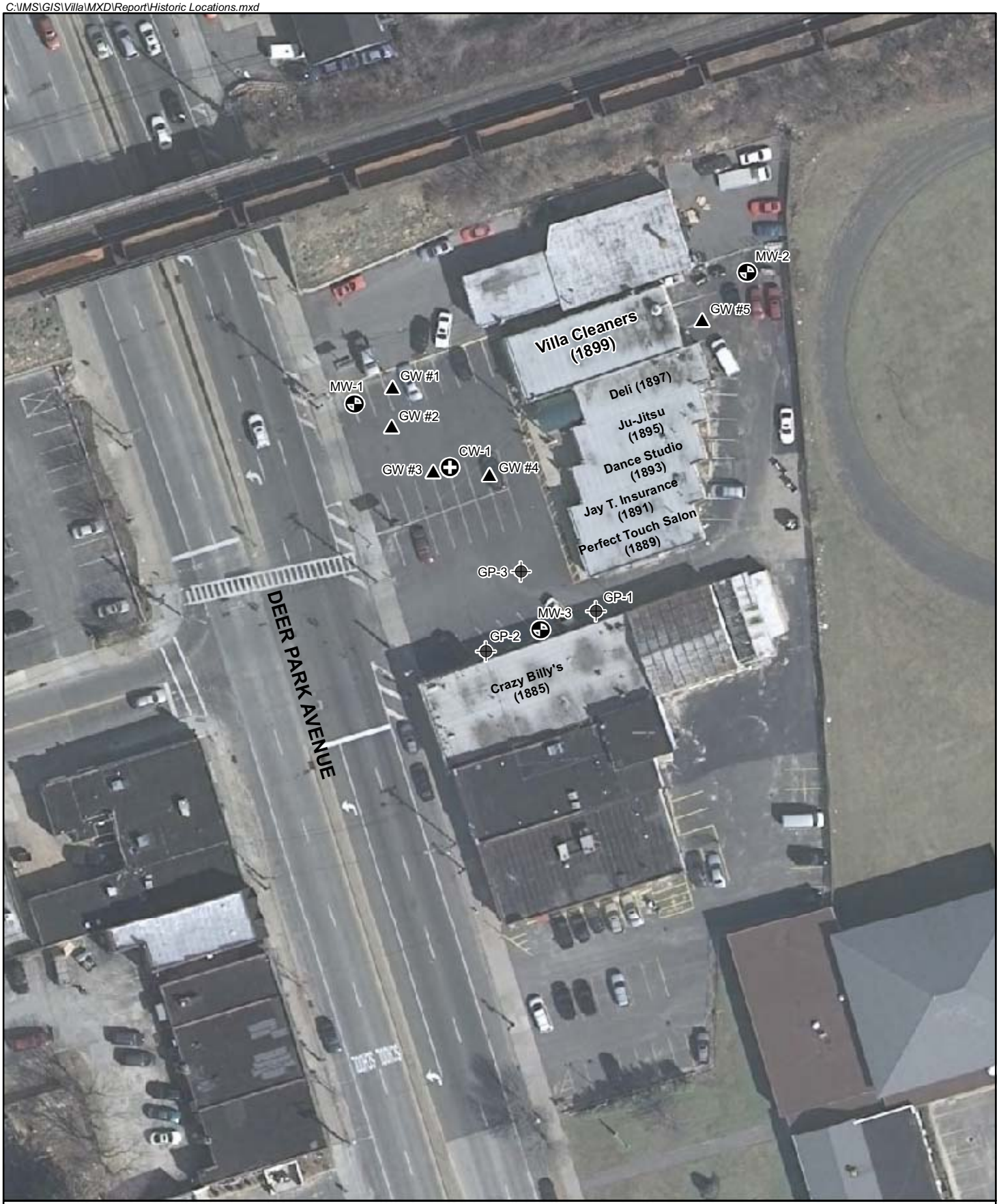


Historical Sample Locations

- Cluster Well
- Groundwater Screening Location
- Monitoring Well
- ▲ Groundwater Soil Boring

N

0 30 60 120 Feet

Figure 4
Historical Sampling Locations
Villa Dry Cleaners
Babylon, New York

CDM

GWS-06	
Depth (ft bgs)	16-20
Date	10/17/08
VOC (µg/L)	
c-1,2-Dichloroethene	11
1,2-Dichlorobenzene	0.56
Toluene	840 D
Vinyl chloride	4.5

GWS-09	
Depth (ft bgs)	16-20
Date	10/23/08
VOC (µg/L)	
c-1,2-Dichloroethene	11 LC
Toluene	89
Vinyl chloride	5.1 HC

GWS-02	
Depth (ft bgs)	16-20
Date	10/08/08
VOC (µg/L)	Not detected

GWS-01	
Depth (ft bgs)	16-20
Date	10/08/08
VOC (µg/L)	
1,4-Dichlorobenzene	2.7

GWS-07	
Depth (ft bgs)	16-20
Date	10/22/08
VOC (µg/L)	
c-1,2-Dichloroethene	2.6
Toluene	4.1
Vinyl chloride	2.4 HC

GWS-04	
Depth (ft bgs)	16-20
Date	10/13/08
VOC (µg/L)	
c-1,2-Dichloroethene	24
Tetrachloroethene	1.1
Trichloroethene	0.83
Vinyl chloride	1.2

GWS-11	
Depth (ft bgs)	16-20
Date	10/28/08
VOC (µg/L)	
c-1,2-Dichloroethene	3.2
Toluene	11
Vinyl chloride	3.4

GWS-03	
Depth (ft bgs)	16-20
Date	10/13/08
VOC (µg/L)	Not detected

GWS-05	
Depth (ft bgs)	16-20
Date	10/20/08
VOC (µg/L)	Not detected

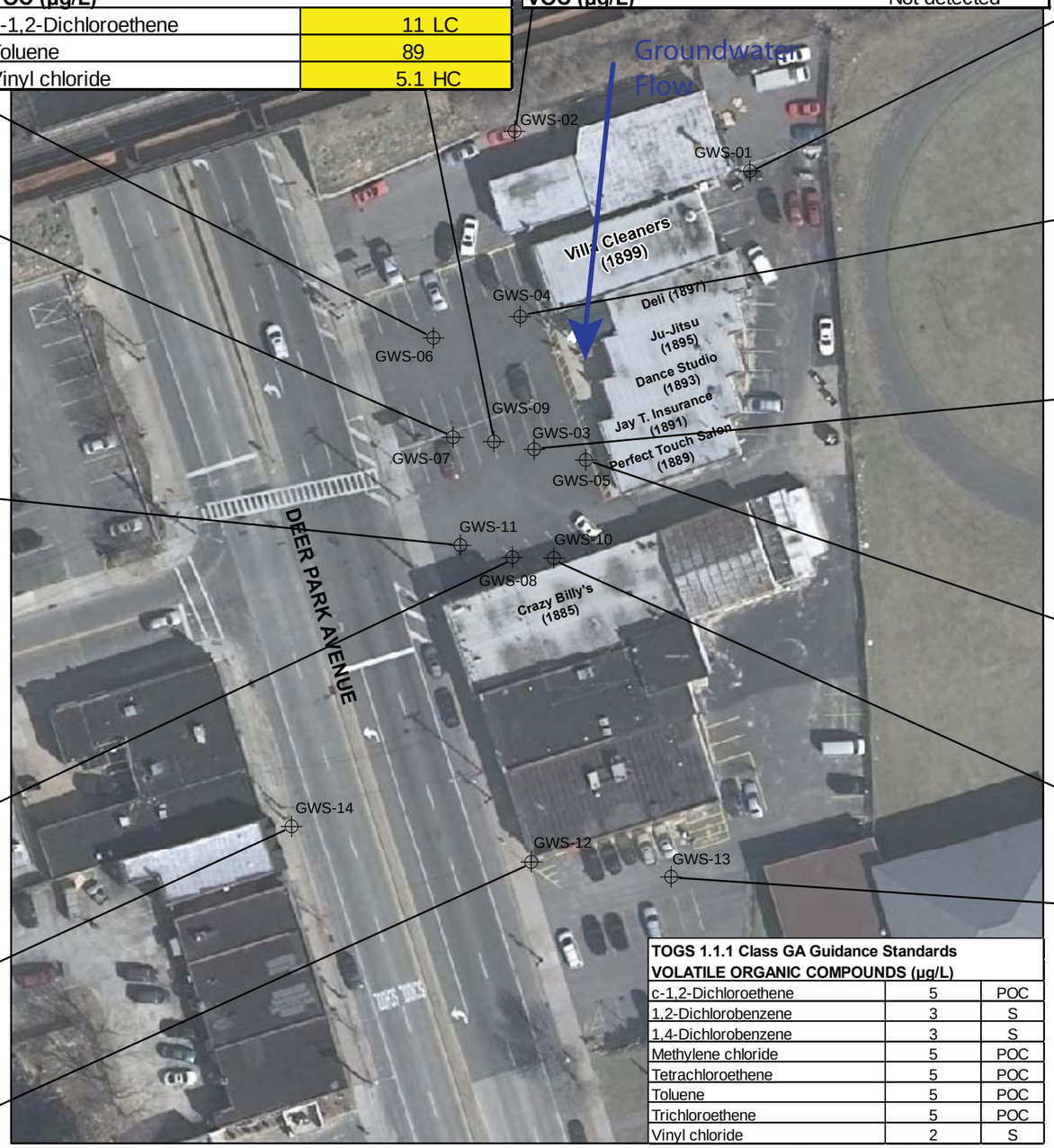
GWS-08	
Depth (ft bgs)	16-20
Date	10/21/08
VOC (µg/L)	
c-1,2-Dichloroethene	3.4
Methylene chloride	0.68 HC
Vinyl chloride	0.85 HC

GWS-10	
Depth (ft bgs)	15-19
Date	10/23/08
VOC (µg/L)	
c-1,2-Dichloroethene	5.1 LC
Tetrachloroethene	1.7

GWS-14	
Depth (ft bgs)	16-20
Date	10/30/08
VOC (µg/L)	
Tetrachloroethene	1.1

GWS-13	
Depth (ft bgs)	16-20
Date	10/30/08
VOC (µg/L)	
c-1,2-Dichloroethene	5.5
Tetrachloroethene	3.4
Trichloroethene	0.98

GWS-12	
Depth (ft bgs)	16-20
Date	10/28/08
VOC (µg/L)	
c-1,2-Dichloroethene	7.9
Tetrachloroethene	1.1
Trichloroethene	0.5



TOGS 1.1.1 Class GA Guidance Standards VOLATILE ORGANIC COMPOUNDS (µg/L)		
c-1,2-Dichloroethene	5	POC
1,2-Dichlorobenzene	3	S
1,4-Dichlorobenzene	3	S
Methylene chloride	5	POC
Tetrachloroethene	5	POC
Toluene	5	POC
Trichloroethene	5	POC
Vinyl chloride	2	S

Notes:

Groundwater Screening Sample Locations

VOC - Volatile Organic Compound
B - Analyte Detected in Associated Method Blank
BGS - Below Ground Surface
FT - Feet
HC - Results May Be Biased High
POC -Principal organic contaminant
S- Standard
U - Non-Detect
J - Estimated Value
LC - Results May Be Biased Low
ug/L - Micrograms/Liter
Highlighted results exceed applicable SCGs

N

0 30 60 120 Feet

Figure 5
Shallow Groundwater Screening Results
Villa Dry Cleaners
Babylon, New York

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GWS-02					
Depth (ft bgs)	24-28	34-38	44-48	54-58	64-68
Date	10/08/08	10/08/08	10/08/08	10/08/08	10/08/08
VOC (µg/L)					
Chloroform	1.3	0.7	0.5 U	0.55	0.5 U
Methyl-t-butyl ether	0.5 U	0.5 U	0.5 U	1.1	0.5 U

GWS-01						
Depth (ft bgs)	26-30	36-40	46-50	56-60	56-60	66-70
Date	10/08/08	10/08/08	10/08/08	10/08/08	10/08/08	10/08/08
VOC (µg/L)						
Chloroform	0.5 U	0.91	1.5	2.2	2.3	4.1
Methyl-t-butyl ether	0.5 U	0.5 U	0.5 U	0.65	0.77	0.76

GWS-06					
Depth (ft bgs)	28-32	38-42	48-52	58-62	68-72
Date	10/17/08	10/17/08	10/17/08	10/17/08	10/17/08
VOC (µg/L)					
Chloroform	0.5 U	0.62	0.5 U	0.5 U	0.5 U

GWS-04					
Depth (ft bgs)	20-24	30-34	40-44	50-54	60-64
Date	10/13/08	10/13/08	10/13/08	10/10/08	10/10/08
VOC (µg/L)					
Chloroform	0.5 U	4	0.59	0.5 U	1.6

GWS-09					
Depth (ft bgs)	21-25	31-35	39-43	49-53	61-65
Date	10/23/08	10/23/08	10/23/08	10/23/08	10/23/08
VOC (µg/L)					
Chloroform	0.5 U	3	0.5 U	0.5 U	0.5 U
c-1,2-Dichloroethene	3.3	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	0.5 U	0.5 U	0.5 U	0.76 HC	0.5 U
Tetrachloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.64

GWS-03					
Depth (ft bgs)	26-30	36-40	46-50	56-60	66-70
Date	10/13/08	10/13/08	10/10/08	10/10/08	10/10/08
VOC (µg/L)					
Chloroform	0.5 U	1.2	1	0.5 U	0.55
Methyl-t-butyl ether	0.5 U	0.5 U	0.5 U,LC	2.7	0.62

GWS-07					
Depth (ft bgs)	22-26	32-36	42-46	52-56	62-66
Date	10/22/08	10/22/08	10/21/08	10/21/08	10/21/08
VOC (µg/L)					
Chloroform	0.5 U	6.2	3.7	0.5 U	0.5 U
Methyl-t-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U	0.71

GWS-05					
Depth (ft bgs)	26-30	36-40	46-50	56-60	66-70
Date	10/20/08	10/20/08	10/20/08	10/17/08	10/17/08
VOC (µg/L)					
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U	0.6
Methyl-t-butyl ether	0.5 U	0.5 U	0.5 U	0.99	0.5 U
Methylene chloride	0.69 B	0.5 U	0.56 B	0.5 U	0.5 U

GWS-11					
Depth (ft bgs)	26-30	36-40	46-50	56-60	66-70
Date	10/28/08	10/28/08	10/27/08	10/27/08	10/27/08
VOC (µg/L)					
Chloroform	1.8	1.6	0.56	0.5 U	1.1

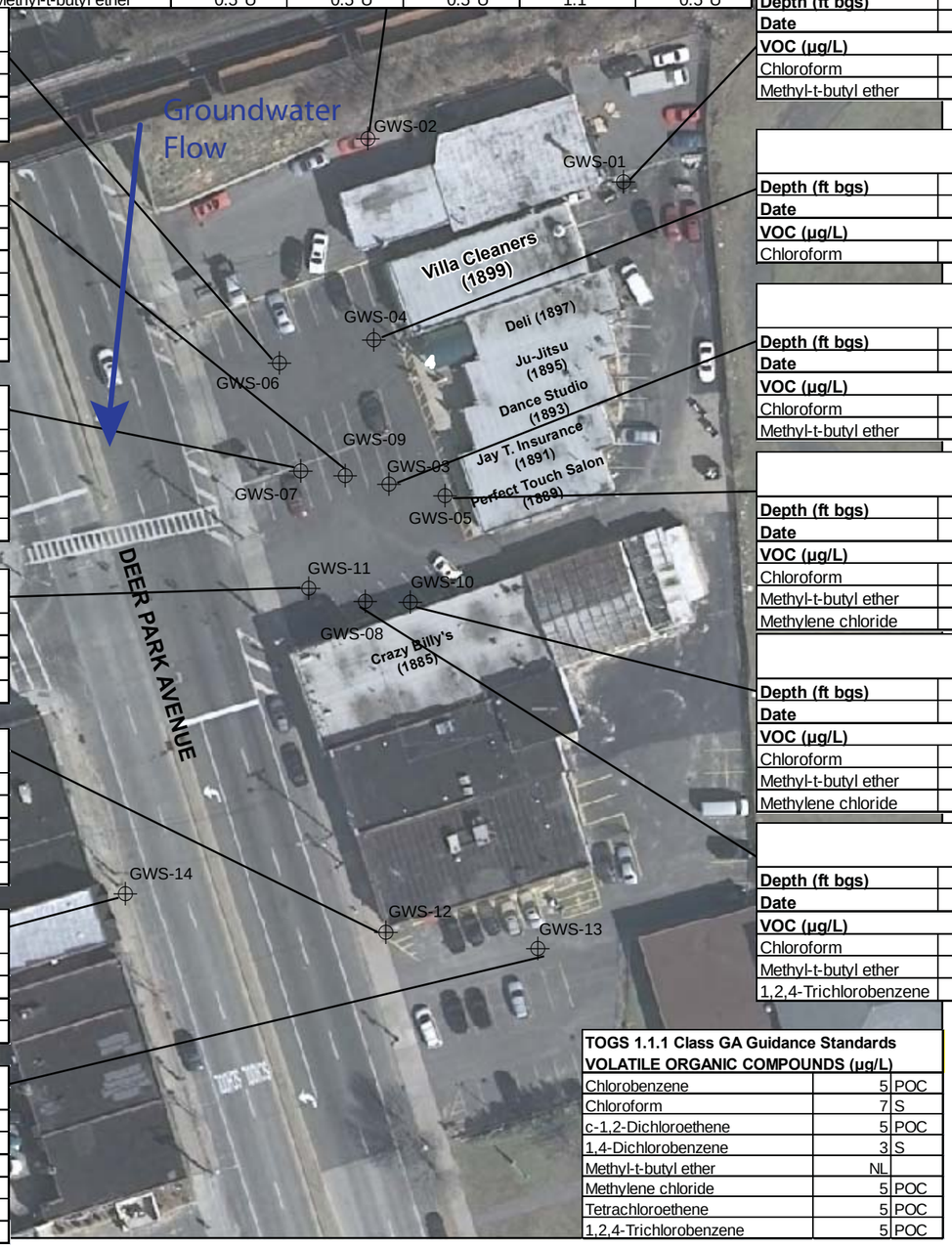
GWS-10					
Depth (ft bgs)	25-29	35-39	45-49	55-59	65-69
Date	10/23/08	10/23/08	10/23/08	10/23/08	10/23/08
VOC (µg/L)					
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U	2.3
Methyl-t-butyl ether	0.5 U	0.5 U	0.5 U	2.8	0.5 U
Methylene chloride	0.5 HC	0.5 U	0.99 HC	0.5 U	0.5 U

GWS-12					
Depth (ft bgs)	26-30	36-40	46-50	56-60	66-70
Date	10/28/08	10/28/08	10/27/08	10/27/08	10/27/08
VOC (µg/L)					
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U	2.1
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.64

GWS-08					
Depth (ft bgs)	26-30	36-40	46-50	56-60	66-70
Date	10/21/08	10/21/08	10/21/08	10/21/08	10/21/08
VOC (µg/L)					
Chloroform	0.96	0.5 U	0.81	0.5 U	1.4
Methyl-t-butyl ether	0.5 U	0.5 U	1	1.8	0.5 U
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	1.2	0.5 U

GWS-14					
Depth (ft bgs)	26-30	36-40	46-50	56-60	66-70
Date	10/30/08	10/30/08	10/30/08	10/30/08	10/30/08
VOC (µg/L)					
Methyl-t-butyl ether	0.5 U,LC	0.5 U,LC	0.5 U	1.3 LC	8.6

GWS-13					
Depth (ft bgs)	26-30	36-40	46-50	56-60	66-70
Date	10/30/08	10/30/08	10/30/08	10/30/08	10/29/08
VOC (µg/L)					
Chlorobenzene	3.1	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.8	0.64	5.3
1,4-Dichlorobenzene	7	0.5 U	0.5 U	0.5 U,LC	0.5 U



TOGS 1.1.1 Class GA Guidance Standards VOLATILE ORGANIC COMPOUNDS (µg/L)		
Chlorobenzene	5	POC
Chloroform	7	S
c-1,2-Dichloroethene	5	POC
1,4-Dichlorobenzene	3	S
Methyl-t-butyl ether	NL	
Methylene chloride	5	POC
Tetrachloroethene	5	POC
1,2,4-Trichlorobenzene	5	POC

Notes:

Groundwater Screening Sample Locations

VOC - Volatile Organic Compound
B - Analyte Detected in Associated Method Blank
BGS - Below Ground Surface
FT - Feet
HC - Results May Be Biased High
POC -Principal organic contaminant
S- Standard
U - Non-Detect
J - Estimated Value
LC - Results May Be Biased Low
ug/L - Micrograms/Liter
NL - Compound currently has no Standard or Guidance Value
Highlighted results exceed applicable SCGs

N

0 30 60 120 Feet

Figure 6
Intermediate Depth Groundwater Screening Results
Villa Dry Cleaners
Babylon, New York

CDM

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GWS-06	
Depth (ft bgs)	78-82
Date	10/14/08
VOC (µg/L)	Not detected

GWS-09	
Depth (ft bgs)	71-75
Date	10/23/08
VOC (µg/L)	Not detected

GWS-02		
Depth (ft bgs)	74-78	84-88
Date	10/08/08	10/08/08
VOC (µg/L)		
1,1-Dichloroethane	0.5 U	1.4
1,1-Dichloroethene	0.5 U	0.51
1,1,1-Trichloroethane	0.5 U	0.96
1,1,2,2-Tetrachloroethane	0.5 U	0.96
Trichloroethene	0.5 U	1.5

GWS-01		
Depth (ft bgs)	76-80	86-90
Date	10/08/08	10/08/08
VOC (µg/L)		
Chloroform	2.6	0.68
1,1-Dichloroethane	0.5 U	2.2
1,1,1-Trichloroethane	0.5 U	0.69
1,1,2,2-Tetrachloroethane	0.5 U	0.69
Trichloroethene	0.5 U	0.63

GWS-07		
Depth (ft bgs)	72-76	81-85
Date	10/21/08	10/21/08
VOC (µg/L)	Not detected	Not detected

GWS-04		
Depth (ft bgs)	70-74	80-84
Date	10/10/08	10/10/08
VOC (µg/L)		
Chloroform	0.78	0.5 U
1,1-Dichloroethane	0.5 U	1.6 LC
1,1-Dichloroethene	0.5 U	0.52
1,1,1-Trichloroethane	0.5 U	0.99
Trichloroethene	0.5 U	1.4

GWS-11	
Depth (ft bgs)	76-80
Date	10/27/08
VOC (µg/L)	
Chloroform	0.55
1,1-Dichloroethane	0.6
Trichloroethene	0.55

GWS-03		
Depth (ft bgs)	66-70	76-80
Date	10/10/08	10/10/08
VOC (µg/L)		
Chloroform	0.55	0.62
Methyl-t-butyl ether	0.62	0.5 U,LC
Tetrachloroethene	0.5 U	0.7

GWS-12	
Depth (ft bgs)	76-80
Date	10/27/08
VOC (µg/L)	
Chloroform	0.8
1,1-Dichloroethane	2.1
1,1-Dichloroethene	0.51
Tetrachloroethene	0.58
1,1,1-Trichloroethane	1
Trichloroethene	2.8

GWS-05	
Depth (ft bgs)	76-80
Date	10/17/08
VOC (µg/L)	
Chloroform	1
1,1-Dichloroethane	1.5
Tetrachloroethene	0.85
1,1,1-Trichloroethane	0.7
Trichloroethene	0.57

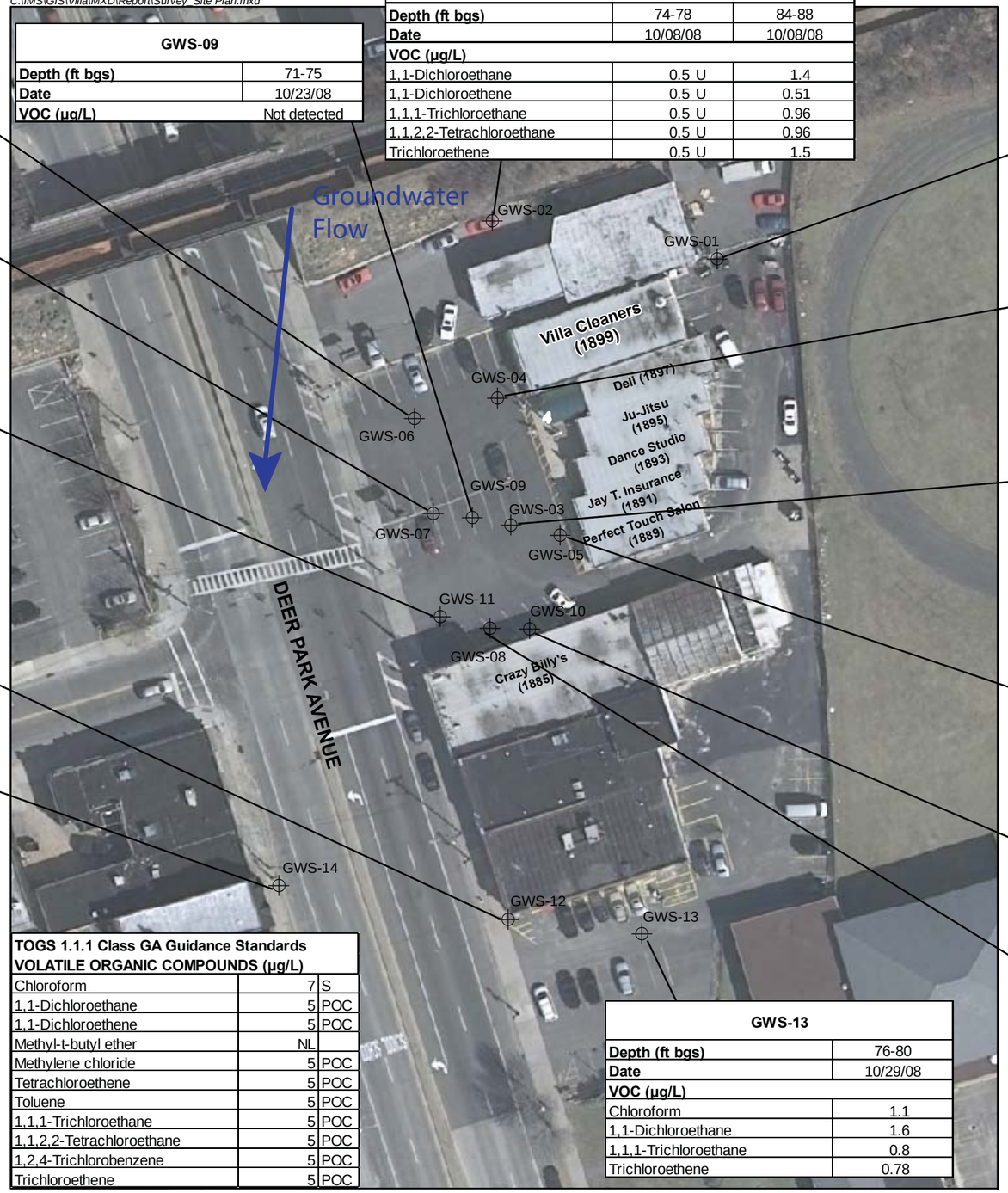
GWS-14	
Depth (ft bgs)	76-80
Date	10/29/08
VOC (µg/L)	
Chloroform	0.62
Methyl-t-butyl ether	0.67

GWS-10	
Depth (ft bgs)	75-79
Date	10/22/08
VOC (µg/L)	
1,1-Dichloroethane	3.3
1,1-Dichloroethene	1.6 HC
Methylene chloride	0.63 HC
1,1,1-Trichloroethane	1.3
Trichloroethene	3.1

GWS-08	
Depth (ft bgs)	76-80
Date	10/21/08
VOC (µg/L)	
Chloroform	0.53
Tetrachloroethene	0.81
Toluene	2.8
1,2,4-Trichlorobenzene	0.52

TOGS 1.1.1 Class GA Guidance Standards VOLATILE ORGANIC COMPOUNDS (µg/L)		
Chloroform	7	S
1,1-Dichloroethane	5	POC
1,1-Dichloroethene	5	POC
Methyl-t-butyl ether	NL	
Methylene chloride	5	POC
Tetrachloroethene	5	POC
Toluene	5	POC
1,1,1-Trichloroethane	5	POC
1,1,2,2-Tetrachloroethane	5	POC
1,2,4-Trichlorobenzene	5	POC
Trichloroethene	5	POC

GWS-13	
Depth (ft bgs)	76-80
Date	10/29/08
VOC (µg/L)	
Chloroform	1.1
1,1-Dichloroethane	1.6
1,1,1-Trichloroethane	0.8
Trichloroethene	0.78



Notes:

Groundwater Screening Sample Locations

VOC - Volatile Organic Compound
B - Analyte Detected in Associated Method Blank
BGS - Below Ground Surface
FT - Feet
HC - Results May Be Biased High
POC -Principal organic contaminant
S- Standard
U - Non-Detect
J - Estimated Value
LC - Results May Be Biased Low
ug/L - Micrograms/Liter
NL - Compound currently has no Standard or Guidance Value

N

0 30 60 120 Feet

Figure 7
Deep Groundwater Screening Results
Villa Dry Cleaners
Babylon, New York

CDM

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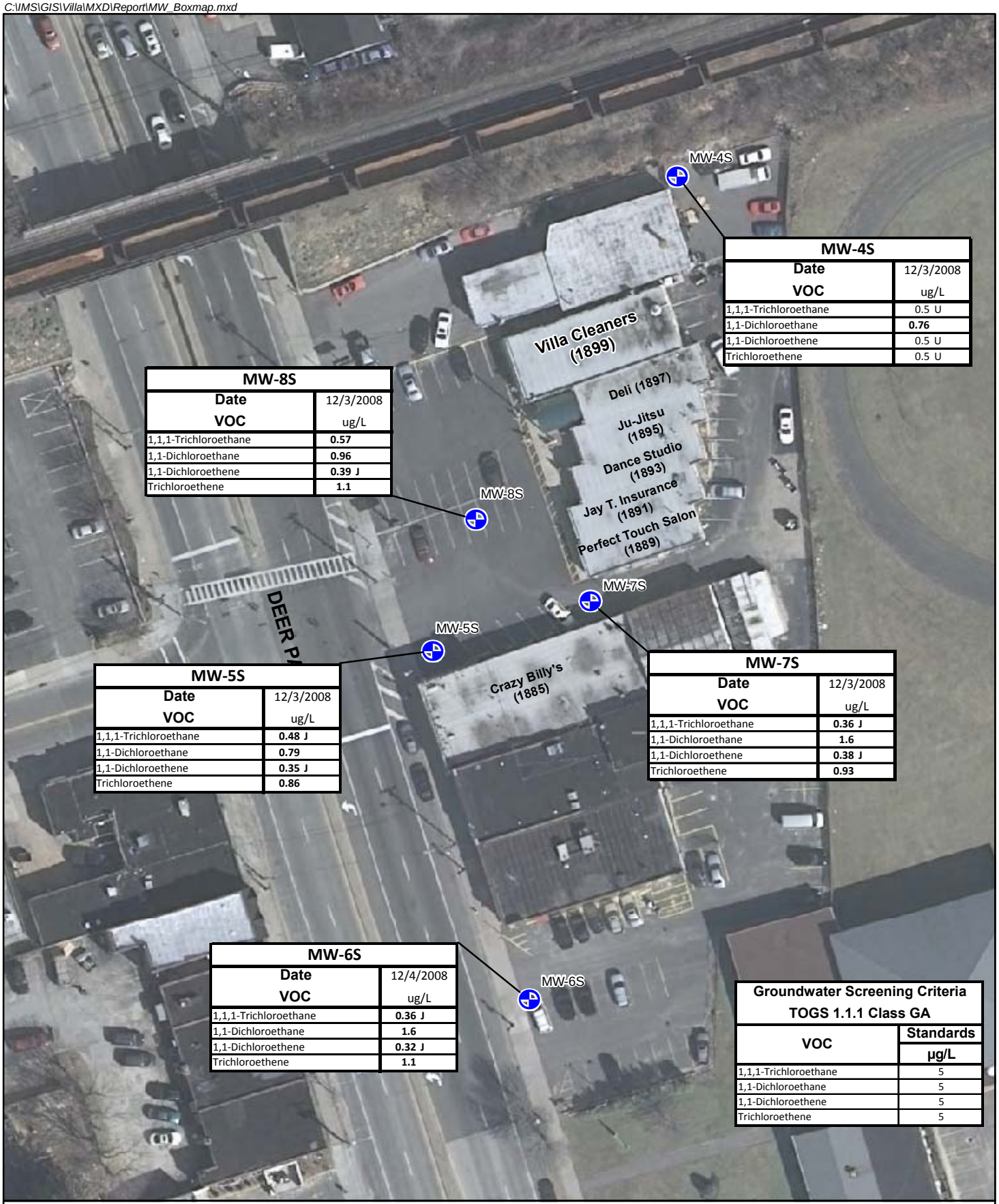

MW-4S	
Date	12/3/2008
VOC	ug/L
1,1,1-Trichloroethane	0.5 U
1,1-Dichloroethane	**0.76**
1,1-Dichloroethene	0.5 U
Trichloroethene	0.5 U

MW-8S	
Date	12/3/2008
VOC	ug/L
1,1,1-Trichloroethane	**0.57**
1,1-Dichloroethane	**0.96**
1,1-Dichloroethene	**0.39 J**
Trichloroethene	**1.1**

MW-7S	
Date	12/3/2008
VOC	ug/L
1,1,1-Trichloroethane	**0.36 J**
1,1-Dichloroethane	**1.6**
1,1-Dichloroethene	**0.38 J**
Trichloroethene	**0.93**

MW-5S	
Date	12/3/2008
VOC	ug/L
1,1,1-Trichloroethane	**0.48 J**
1,1-Dichloroethane	**0.79**
1,1-Dichloroethene	**0.35 J**
Trichloroethene	**0.86**

MW-6S	
Date	12/4/2008
VOC	ug/L
1,1,1-Trichloroethane	**0.36 J**
1,1-Dichloroethane	**1.6**
1,1-Dichloroethene	**0.32 J**
Trichloroethene	**1.1**

Groundwater Screening Criteria TOGS 1.1.1 Class GA	
VOC	Standards µg/L
1,1,1-Trichloroethane	5
1,1-Dichloroethane	5
1,1-Dichloroethene	5
Trichloroethene	5

Sample Locations

Monitoring Well (samples from 16-20 ft bgs)

Notes:
J - Estimated Value
ug/L - Micrograms/Liter
VOC - Volatile Organic Compound

N

0 30 60 120 Feet

Figure 8
Monitoring Well Sampling
Volatile Organic Compound Detections
Villa Dry Cleaners
Babylon, New York

CDM

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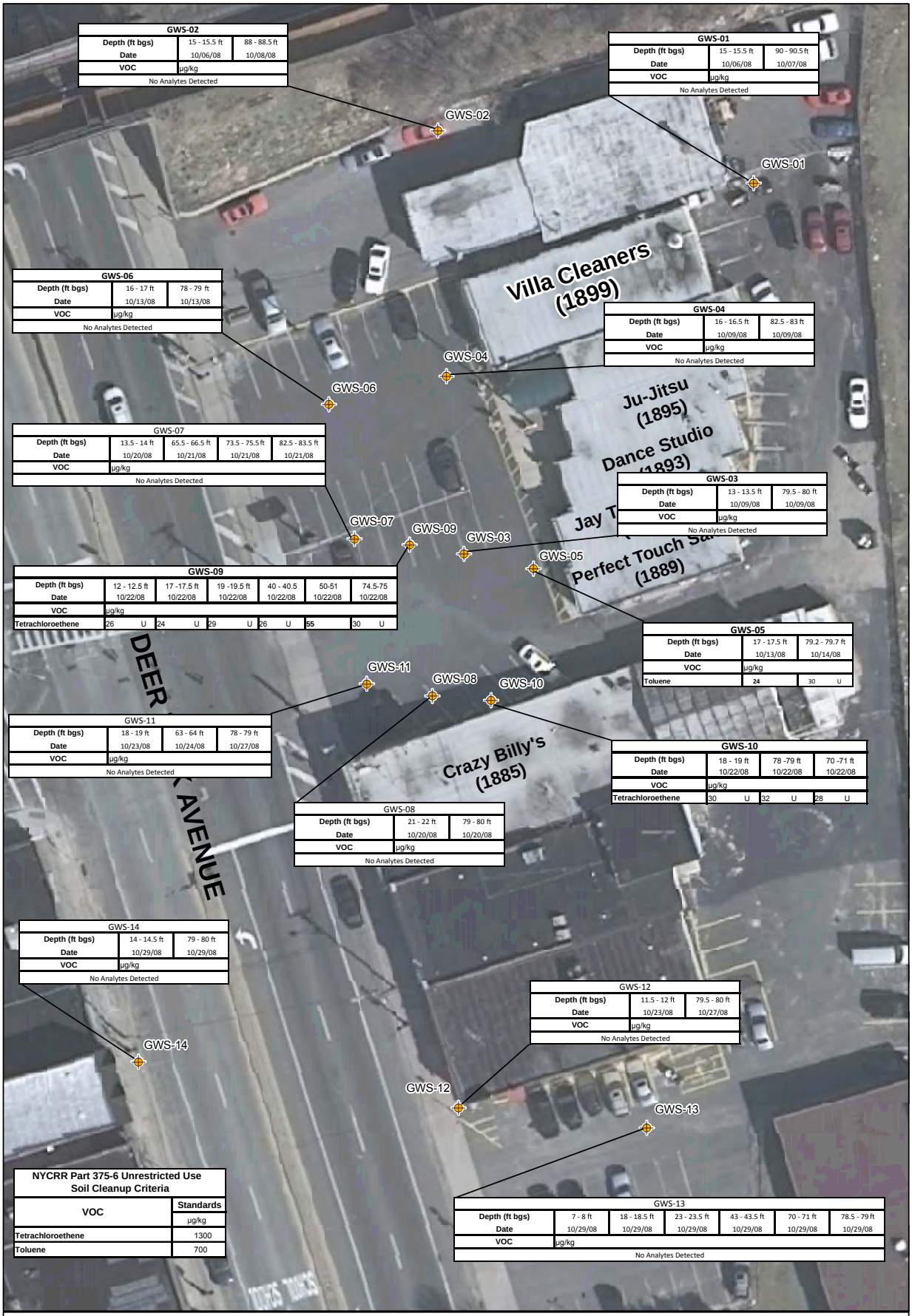

Sample Locations

Soil Sampling Locations

Notes:
BGS - Below Ground Surface
FT - Feet
J - Estimated Value
ug/kg - Micrograms/Kilogram
U - Non-Detect
VOC - Volatile Organic Compound

N

0 15 30 60 Feet

Figure 9
Subsurface Soil
Volatile Organic Compound Detections
Villa Dry Cleaners
Babylon, New York

CDM